PTO/SB/05 (08-03) Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

NAA 0021 PA

Dietmar W. Hutmacher

Title

DUEL AXIS BIOREACTOR, SYSTEM AND METHOD FOR GROWING CELL OR TISSUE CULTURES

Express Mail Label No.

EL961516296US

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 **APPLICATION ELEMENTS** ADDRESS TO: See MPEP chapter 600 concerning utility patent application contents. Alexandria VA 22313-1450 CD-ROM or CD-R in duplicate, large table or Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Computer Program (Appendix) 2. 🗹 Applicant claims small entity status. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) 48 3. Specification [Total Pages_ Computer Readable Form (CRF) (preferred arrangement set forth below) Descriptive title of the invention b. Specification Sequence Listing on: - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D CD-ROM or CD-R (2 copies); or - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention Brief Description of the Drawings (if filed)
 Detailed Description Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS - Claim(s) - Abstract of the Disclosure Assignment Papers (cover sheet & document(s)) 4. Drawing(s) (35 U.S.C. 113) [Total Sheets Power of 37 CFR 3.73(b) Statement 10. Attorney (when there is an assignee) 5. Oath or Declaration unsigned [Total Sheets 11. L English Translation Document (if applicable) a. Newly executed (original or copy) Information Disclosure Copies of IDS 12. Statement (IDS)/PTO-1449 Citations b. Copy from a prior application (37 CFR 1.63(d)) 13. **Preliminary Amendment** (for continuation/divisional with Box 18 completed) 14. 🔽 Return Receipt Postcard (MPEP 503) (Should be specifically itemized) **DELETION OF INVENTOR(S)** 15. Certified Copy of Priority Document(s) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). (if foreign priority is claimed) 16. 📖 Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 6. 🔽 Application Data Sheet. See 37 CFR 1.76 17. 🔲 Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Divisional Continuation-in-part (CIP) Continuation of prior application No.: Examiner_ For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS 23368 Customer Number: OR Correspondence address below Name Address City State Zip Code Country Telephone Fax Name (Print/Type) | John D. Reed Registratigh No. (Attorney/Agent) | 46,506 Signature Date February 6, 2004

This collection of information required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of

Applicants : Hutm

: Hutmacher et al.

Title

: DUAL AXIS BIOREACTOR, SYSTEM AND METHOD FOR

GROWING CELL OR TISSUE CULTURES

Docket No.

: NAA 0021 PA

MAIL STOP PATENT APPLICATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

"Express Mail" Mailing Label Number / EL761516276US Date of Deposit February 6, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the MAIL STOP PATENT APPLICATION, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Alicia M. Weimer Legal Secretary

JDR/kec